

We claim:

1. A process for preparing carboxyl-terminated polyisobutenes, which comprises reacting a polyisobutene which is terminated by an ethylenically unsaturated double bond and has the formula I



where

A is a radical derived from a polymerization initiator,

M is a polymer chain comprising repeating units of the formula II



B is a radical of the formula III or IV



where

R¹ and R² are each H, C₁-C₄-alkyl or aryl and

n is from 1 to 6,

with ozone and, if appropriate, subsequently heating the reaction product obtained to from 60 to 150°C.

2. A process as claimed in claim 1, wherein R¹ and R² are each phenyl.
3. A process as claimed in claim 1, wherein R¹ and R² are each methyl.
4. A process as claimed in any of the preceding claims, wherein the reaction product obtained is heated to from 70 to 120°C.
5. A process as claimed in any of the preceding claims, wherein the polyisobutene terminated by an ethylenically unsaturated double bond is reacted with ozone at from -100 to 40 °C.
6. The use of carboxyl-terminated polyisobutenes for the surface modification of an organic or inorganic material.

7. The use of carboxyl-terminated polyisobutenes as additives in fuel and lubricant compositions.